Abstract

According to the invention, power matching in an electricity grid (N) is carried out by regulation of a storage power station (S) which is operated in the grid. In the event of changes in the power available or in the power consumption in the grid, the power consumption of the power consuming machine (V) in the storage power station is adapted so as to maintain equilibrium between the total power generation and the total power consumption. Power matching by regulation of the power load can be carried out around one order of magnitude more quickly than power matching by regulation of power generating machines (G1, G2, G3, GS) which act on the grid, and saves alternating thermal loads in the power stations.

(Figure 1)